

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID R. HARTMAN,
WILLIAM C. BRADY, DAVID V. STOTLER,
and
SUSAN M. PIERIK

Appeal No. 2001-2187
Application No. 09/333,356

ON BRIEF

Before WILLIAM F. SMITH, DELMENDO, and MOORE, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-2. Claims 3-9 are allowed, claims 9-22 are withdrawn from consideration, and claims 23-43 have been canceled. Thus, only claims 1-2 are before us on this appeal.

REPRESENTATIVE CLAIM

Claim 1 is representative, and reads as follows on the next page:

1. An apparatus for forming high-temperature fusing batch material into fibers comprising:

a walled melting receptacle including: an open region in which the high-temperature fusing batch material is received; a melting region in which the batch material is melted to form molten material in flow communication with said open region; a chute in which flow of the molten material is regulated in flow communication with said melting region, the chute having a first wall, a second wall opposing the first wall, a third wall between said first wall and said second wall, and a fourth wall opposing said third wall, said walls together defining an upper chute portion and a lower chute portion with the lower chute portion having a cross-sectional area smaller than the cross sectional area of the upper chute portion; and a discharge region from which the molten material is discharged in flow communication with the lower chute portion of said chute;

a heating element in the melting region for melting the batch material; and

a baffle unit within the chute, said baffle unit defining a four-sided baffle area perpendicular to flow of molten material and covering a substantial portion of the cross-sectional shape of the chute, said baffle area having openings defined therein, said baffle unit having one abutting side contacting said first wall of the chute, another abutting side contacting said second wall of the chute, one end facing said third wall of the chute with a gap therebetween, and another end facing said fourth wall of the chute with a gap therebetween, whereby said molten material can travel through the melting receptacle from the melting region to the discharge region while being partially impeded by the baffle unit.

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The References

In rejecting the claims under 35 U.S.C. § 103(a), the examiner relies upon the following references:

Coggin, Jr. (Coggin)	3,988,135	Oct. 26, 1976
Demaschquie	4,421,538	Dec. 20, 1983

The Rejections

Claims 1-2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Demaschquie in view of Coggin.

The Invention

The invention relates to an apparatus for forming fibers from high-temperature fusing batch material. It is said to provide an in-line process for the direct production of high-temperature resistant glass fibers. A top-charging electric glass-melting furnace is positioned vertically above a bushing plate containing apertures through which fibers are extruded, and an intermediate flow regulating baffle system. (Specification, page 1, lines 5-10). The baffle system and flow system are described further in claim 1, reproduced above.

The Rejection of Claims 1-2 Under 35 U.S.C. § 103 (a)

The examiner has found that Demaschquie discloses the wall melting receptacle with heating unit, and Coggin teaches superior bushings. (Examiner's Answer, page 3, lines 13-15). The examiner concludes it would have been obvious to provide the Demaschquie

structure with the Coggin bushing for its advantages (Final Rejection, page 3, lines 2-5).¹

The appellants' principal argument in the opening appeal brief is that the examiner has failed to make out a *prima facie* case of obviousness in that he has failed to find support for the appellants' claimed apparatus including a baffle unit within a chute. (Appeal Brief, page 5-6). This argument is based upon the appellants' belief that the Coggin deflector plate 56 is located below, and not within, the discharge flow passage 18 of Coggin. (Appeal Brief, page 5, lines 20-21).

First, we note that in examining a patent claim, the PTO must apply the broadest reasonable meaning to the claim language,

¹ Review of the respective positions of the appellants and the examiner is difficult in this case due to the paucity of explanation afforded by the examiner. The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention, regardless of the ground, rests with the examiner. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The examiner has not explained how the term "chute" is interpreted in his claim interpretation, nor what evidence he relies upon to establish that the Coggin baffle is within the chute of the walled melting receptacle. The late amplification of his position in the Examiner's Answer leaves us not only with a Reply Brief from the Appellant which is unanswered, but also now raises more issues than the Appeal Brief.

The record contains the statements from the examiner that "[t]he Coggin drawings clearly show a baffle in a chute. It appears that Applicant does not consider the structure in which the Coggin baffle is located to be a chute. However, the Examiner can find no basis for agreeing with such position." Final Rejection, page 4, 1-4). "Feature 56 of Coggin is the baffle unit within the chute." (Examiner's Answer, page 5, line 11). "Examiner can find no reason why such cannot be considered a chute. Examiner has yet to be presented with a reason why the Coggin bottom portion structure is not a chute." (Examiner's Answer, page 7, lines 3-5). This argument puts the cart before the horse; it is the examiner's burden to parse the claim and apply it to the prior art, not the appellant's to prove why it is not so.

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taking into account any definitions presented in the specification. In re Yamamoto, 740 F.2d 1569, 1571, 222 USPQ 934, 936 (Fed. Cir. 1984). Second, it is clear that the meaning of the words "chute" and "bushing" will prove important in rendering our decision.

Appellants urge that their baffle unit, as claimed is located within the chute, and not below the flow passage (i.e, their baffle unit is not within the bushing assembly, as taught by Coggin). (Appeal Brief, page 6, lines 4-5). Consequently, in essence they are urging that the chute must be part of the walled melting receptacle, which is not part of the bushing.

We find that the specification (see especially page 10, lines 11-24 and figures 1 and 2) states that there is a flow-regulating system 200 between the bushing 400 and the glass-melting furnace. The system comprises a narrowing area between the furnace melting region and the bushing such that the glass flows in to a funnel shaped liner or chute 201. The bushing 400 is illustrated in the figures as more than simply the orifice plate.

We conclude that the appellants' specification therefore defines the "bushing" as the portion of the claimed apparatus below the chute (which chute goes through the refractory); as depicted by arrow 400 in figure 1 (see also specification, paragraph spanning pages 11-12). The bushing necessarily includes

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its own flow passage through the bushing assembly, and as such appears consistent with the prior art. See Demasquie, column 3, lines 49-57, and figure 1, reference numeral 21, which clearly depicts a bushing as being affixed to the floor of the forehearth and having its own flow passage. Coggin, column 1, lines 55-62, also discloses that the bushing (which is readily broken away from the flow block) has its own flow passage.

It also appears that the appellants' specification defines the "chute" as a narrowing area between the bushing and the furnace melting region. (Specification, page 10, lines 17-20). We interpret the chute to necessarily be associated with the flow block, as the claims require the chute to be part of the walled melting receptacle. We therefore deem the claims to be limited to a chute associated with the flow block and not the bushing.

Turning to the art, we do not see a baffle unit within the chute region of Demaschquie, but we, like the examiner, find that Coggin teaches a perforated deflector plate 56 (see figures 1, 2, 3, and 10 specifically) located in the flow passage of the bushing. It is said to have two functions: "...the plate functions to reduce the degree to which molten glass entering the chamber impinges directly on the reinforcing plate 46 and to direct particles, such as refractory stones or crystals, to the collection areas." (Coggin, column 6, lines 25-30). Coggin was

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aware of the problem of orifice plate distortion (Column 1, lines 59-60).

Coggin's deflector plate also "partially impedes" the flow of molten glass. Further, it must be attached to a first and second wall, while being spaced by a gap between a third and a fourth wall. (See figure 3, ref. numeral 56).

Accordingly, although not stated with any specificity in the examiner's rejection, we also come to the parallel conclusion that one of ordinary skill in the art would have been motivated to import the bushing structure of Coggin into the furnace apparatus of Demaschquie for its superior advantages, i.e. reducing direct impingement of the glass on, and deflecting particles away from, the orifice plate.

However, we agree with the appellant and find that the claim limitation that the baffle unit must be in the chute not to be met by the examiner's proposed combination of references. Coggin's diverting plate 56, when swapped with Demaschquie's bushing, results in a structure wherein the "baffle" is in the bushing. While we agree with the examiner that the baffle is nonetheless within the flow path of the melted glass; the claim requires the baffle to be in the chute itself. The claimed chute is part of the refractory melting receptacle; and not part of the

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bushing. Consequently, we determine that the examiner has not made out a prima facie case of obviousness, and we shall reverse this rejection.

Summary of Decision

The rejection of Claims 1-2 under 35 U.S.C. §103(a) as unpatentable over Demaschque in view of Coggin is reversed.

REVERSED

WILLIAM F. SMITH)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
ROMULO H. DELMENDO)	
Administrative Patent Judge)	APPEALS AND
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